



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TRANSACTIONS
OF THE
AMERICAN MATHEMATICAL SOCIETY

EDITED BY
ELIAKIM HASTINGS MOORE
ERNEST WILLIAM BROWN THOMAS SCOTT FISKE

PUBLISHED QUARTERLY BY THE SOCIETY WITH
THE COÖOPERATION OF

HARVARD UNIVERSITY
YALE UNIVERSITY
PRINCETON UNIVERSITY
COLUMBIA UNIVERSITY
HAVERFORD COLLEGE

NORTHWESTERN UNIVERSITY
CORNELL UNIVERSITY
THE UNIVERSITY OF CALIFORNIA
BRYN MAWR COLLEGE
THE UNIVERSITY OF CHICAGO

VOLUME 2
1901

LANCASTER, PA., AND NEW YORK
THE MACMILLAN COMPANY
AGENTS FOR THE SOCIETY
1901

PRESS OF
THE NEW ERA PRINTING COMPANY,
LANCASTER, PA.

TABLE OF CONTENTS

VOLUME 2 1901

| | PAGES |
|---|---------|
| BLICHFELDT, H. F., of Stanford University, Cal. Note on the functions of the form | 100-102 |
| $f(x) \equiv \phi(x) + d_1 x^{n-1} + d_2 x^{n-2} + \cdots + d_n$ | |
| which in a given interval differ the least possible from zero | 100-102 |
| _____ A new determination of the primitive continuous groups in two variables | 249-258 |
| BÔCHER, MAXIME, of Cambridge, Mass. Certain cases in which the vanishing of the Wronskian is a sufficient condition for linear dependence | 139-149 |
| _____ An elementary proof of a theorem of Sturm | 150-151 |
| _____ On certain pairs of transcendental functions whose roots separate each other | 428-436 |
| BOLZA, O., of Chicago, Ill. New proof of a theorem of Osgood's in the calculus of variations | 422-427 |
| CAJORI, FLORIAN, of Colorado Springs, Col. Divergent and conditionally convergent series whose product is absolutely convergent | 25- 36 |
| DICKSON, LEONARD EUGENE, of Chicago, Ill. Canonical forms of quaternary abelian substitutions in an arbitrary Galois field | 103-138 |
| _____ Theory of linear groups in an arbitrary field | 363-394 |
| FIELDS, J. C., of Hamilton, Ontario, Canada. On the reduction of the general abelian integral | 49- 86 |
| HILBERT, DAVID, of Göttingen, Germany. Ueber Flächen von constanter Gaußscher Krümmung | 87- 99 |
| MCDONALD, J. H., of Lafayette, Ind. On the system of a binary cubic and quadratic and the reduction of hyperelliptic integrals of genus two to elliptic integrals by a transformation of the fourth order | 437-458 |
| METZLER, W. H., of Syracuse, N. Y. On certain aggregates of determinant minors | 395-403 |
| MERTENS, F., of Vienna, Austria. Zur linearen Transformation der ϑ -Reihen | 331-342 |
| MILLER, G. A., of Ithaca, N. Y. Determination of all the groups of order p^m which contain the abelian groups of type $(m-2, 1)$, p being any prime | 259-272 |

| | PAGES |
|---|---------|
| MOORE, ELIAKIM HASTINGS, of Chicago, Ill. Concerning Harnack's theory of improper definite integrals | 296-330 |
| _____ OSGOOD, W. F., of Cambridge, Mass. On the theory of improper definite integrals | 459-475 |
| $\int_{x_0}^{x_1} F(x, y, y') dx$ | |
| when x_0 and x_1 are conjugate points, and the geodesics on an ellipsoid of revolution: a revision of a theorem of Kneser's | 166-182 |
| _____ On a fundamental property of a minimum in the calculus of variations and the proof of a theorem of Weierstrass's | 273-295 |
| PORTER, M. B., of New Haven, Conn. Sets of coincidence points on the non-singular cubics of a syzygetic sheaf | 37- 42 |
| PRINGSHEIM, A., of Munich, Germany. Ueber die Anwendung der Cauchy'schen Multiplikationsregel auf bedingt convergente oder divergente Reihen | 404-412 |
| _____ Ueber den Goursat'schen Beweis des Cauchy'schen Integralsatzes | 413-421 |
| SMITH, PERCEY F., of New Haven, Conn. Geometry within a linear spherical complex | 234-248 |
| STECKER, HENRY FREEMAN, of Ithaca, N. Y. On the determination of surfaces capable of conformal representation upon the plane in such a manner that geodetic lines are represented by algebraic curves | 152-165 |
| STRINGHAM, IRVING, of Berkeley, Cal. On the geometry of planes in a parabolic space of four dimensions | 183-214 |
| STRONG, WENDELL M., of New Haven, Conn. Note on non-quaternion number systems | 43- 48 |
| VAN VLECK, E. B., of Middletown, Conn. On the convergence of continued fractions with complex elements | 215-233 |
| _____ On the convergence and character of a certain form of continued fraction | 476-483 |
| WILCZYNSKI, E. J., of Berkeley, Cal. Invariants of systems of linear differential equations | 1- 24 |
| _____ Geometry of a simultaneous system of two linear homogeneous differential equations of the second order | 343-362 |
| Notes and errata: volumes 1 and 2 | 484-487 |